DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013590 Address: 333 Burma Road **Date Inspected:** 22-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 7CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW7C-007. The welder is identified as #067571 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA037-002. The welder is identified as #066361 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 7BW

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as CA035-006. The welder is identified as #066361 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 7AW/7BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as DP647-001-020. The welder is identified as #045221 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

Segment 7BE/7CE

This QA Inspector observed Base Metal repair using the Shielded Metal Arc Welding (SMAW) in progress at locations of removed fit up plates along the Bottom Plate segment splice. The welder is identified as #054467 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR11052.

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) of Base Metal Repairs at removed fit up plates along the Side Plate CJP splice, cross beam side.

Segment 7AE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) on Longitudinal Diaphragm flange to Floor beam CJP weld connection, panel point 49 east cross beam side.

Segment 7AE/7BE

This QA Inspector observed ABF personnel performing UT on Edge Plate segment splice, cross beam side and Deck Plate CJP splice. D scan was performed.

ZPMC Quality Control (QC) Inspector is identified as Fang Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Plate Yard

This QA Inspector selected two (2) 460mm x 355mm plate check samples and assigned a QA Lot number to each of following sampled material:

Item 721: 35mm A709M-345F2-X-Z, HT# 09208183, Lot# B222-001-10 Item 722: 35mm A709M-345F2-X-Z, HT# 09208181, Lot# B222-002-10

Samples were marked with Lot number, Item number, material thickness, date and direction of rolling. Samples

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

will be shipped to an Independent Testing lab.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer